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10/505,259

08/20/2004

Seppo Vesterinen

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EXAMINER

PATEL, JATIN K

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/505,259

Applicant(s)

VESTERINEN, SEPPO

Examiner

Jatin K. Patel

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892). | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2609

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated over Sharp (US Patent 6694471, Filed 12/27/2000).

Regarding claim 1, an internet protocol based system comprising a plurality of entities, at least two of said entities being arranged to use SCTP for signaling there between, said SCTP signaling comprising a source port number, a destination port number, and connection identity information relating to a connection between at least two of said entities (fig 1, fig 2, column 3, line 7-10, line 52-58 and column 4, line 26-35).

Regarding claim 2, most of limitations teaches as applied to claim 1 above, wherein said connection identity information comprises address information (fig 2, column 4, line 26-35).

Regarding claim 3, most of limitations teaches as applied to claim 2 above, wherein said address information identifies at least one other further entity (fig 1, one of box 12 might be user terminal or server).

Art Unit: 2609

Regarding claim 4, most of limitations teaches as applied to claim 1 above, wherein said connection identity information comprises information identifying an application (SCTP is like TCP connection oriented protocol, and maintain connection (relationship) during communication column 3, line 53-58 and column 2, line 40-68).

Regarding claim 5, most of limitations teaches as applied to claim 1 above, wherein said connection identity information identifies a connection flow (column 2, line 40-68, fig 1, fig 2).

Regarding claim 6, most of limitations teaches as applied to claim 1 above, wherein said connection identity information is provided in an SCTP packet (fig 2, source port number and destination port number).

Regarding claim 7, most of limitations teaches as applied to claim 6 above, wherein said connection identity information is provided in the data chunk part of the SCTP packet (fig 2, and 3).

Regarding claim 8, most of limitations teaches as applied to claim 7 above, wherein said connection identity information is provided in a payload protocol identifier field (fig 3, box 88).

Regarding claim 9, most of limitations teaches as applied to claim 7 above, wherein said connection identity information is provided in a field between a stream sequence number field and user data (fig 3, item 84, 86 stream identifier and stream sequence number respectively).

Regarding claim 10, most of limitations teaches as applied to claim 6 above, wherein said connection identity information is provided in a header for the SCTP packet (fig 2,

Art Unit: 2609

item 52 is header).

Regarding claim 11, most of limitations teaches as applied to claim 6 above, wherein said address information is provided in a separate field in said SCTP packet (fig 2, source and destination port number).

Regarding claim 12, most of limitations teaches as applied to claim 1 above, wherein at least one of the two entities is arranged to provide further address information relating to at least one of said two entities (fig 2, source entity and destination entity by their port number).

Regarding claim 13, most of limitations teaches as applied to claim 1 above, wherein at least one of said two entities comprises means for sending and/or receiving SCTP packets to and/or from the other of said two entities (fig 1, 2 two different user terminal or server).

Regarding claim 14, most of limitations teaches as applied to claim 1 above, wherein at least one of said two entities comprises means for setting up SCTP associations (column 4, line 27-35, fig 2).

Regarding claim 15, most of limitations teaches as applied to claim 1 above, wherein at least one of said two entities comprises means for receiving status information relating to SCTP associations (column 4 line 63 to column 5 line 5, sending acknowledgement to sender to confirm receiving status).

Regarding claim 17, most of limitations teaches as applied to claim 1 above, wherein at least one of said two entities comprises means for adding said connection identity information of said further entity to a SCTP packet (fig 2, source and destination

Art Unit: 2609

information).

Regarding claim 18, most of limitations teaches as applied to claim 1 above, wherein said further entity comprises at least one of the following: user terminal, user, group of users, service, network, server, cell or BTS (user terminal in fig 1, item 12).

Regarding claim 19, most of limitations teaches as applied to claim 1 above, wherein one of said entities is one of the following: base station; controller; radio network controller; core network; radio network access server; gateway or server and (fig 1 consider server 1 on LHS box 12); the other of said entities is one of the following: base station; controller; radio network controller; core network; radio network access server; gateway or server (fig 1 consider server 2 on RHS box 12).

Regarding claim 20, a method for use in an internet protocol based system comprising a plurality of entities, comprising the steps of:

sending SCTP transport signaling information between two of said entities, said SCTP signaling information comprising a source port number, a destination port number, and connection identity information relating to a connection between said two entities (fig 1, fig 2, column 3, line 7-10, line 52-58 and column 4, line 26-35).

Regarding claim 21, an entity for use in a internet protocol based system, said entity comprising means for sending to another entity an SCTP transport packet, said entity being arranged to include in said packet a source port number, a destination port number, and connection identity information relating to a connection between at least

Art Unit: 2609

two of said entities (fig 1, fig 2, column 3, line 7-10, line 52-58 and column 4, line 26-35).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp in view of Willars (US Pub 2001/005145, File date 04/26/2001).

Regarding claim 16, Sharp teaches most of limitations as applied to claim1 above.

Sharp does not teach to forwarding SCTP packets to a radio network layer in dependence on said connection identity information of said further entity.

Willars teaches to forwarding SCTP packets to a radio network layer in dependence on said connection identity information of said further entity (fig 5A, 5B, item 88 SCTP is used for transporting the signaling over IP network).

Art Unit: 2609

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use SCTP for transporting the signaling over IP network from Willars to Sharp to preserve general architecture and principle of 3GPP UTRAN R99 and minimal impact on application layer protocols (Willars item # 0147).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Turina (US Pub 20020075900) disclosed regarding Signaling transport protocol for load

*Walker (US 20030193696) disclosed regarding Voice and Fax over IP call establishment

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jatin K. Patel whose telephone number is 571-270-1839. The examiner can normally be reached on 8-5 Mon-Fri Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on 571-272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2609

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP

A handwritten signature in black ink, appearing to read "Steven Pen", located in the lower right quadrant of the page.